Modern Perspectives of Aeronautical and Aerospace Engineering

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EDITORIAL

Aeronautical engineering deals with designing, building, construction, and fabrication of aircraft space craft while Aerospace engineering relates to the branch of technology and industry that comprises of aviation science and space flight maneuvering. The field of aeronautical and aerospace engineering is truly multidisciplinary and wide-ranging and covers diverse disciplines and domains and not just limited to engineering but many related and supporting activities. This field covers and combines several disciplines to enable the aerospace industry yield innovative and technologically advanced vehicles.

Aeronautical engineering is a core subject of aeronautics that includes fluid dynamics, material science, structural analysis, propulsion, automatic control, guidance aircraft performance, and aircraft structures. Aeronautical engineering deals with the design, development, fabrication, production, testing and technological development of aircrafts and space crafts. Aeronautical engineering covers advanced topics such as propulsions, advanced aircraft design, aerodynamics, computational fluid dynamics, diagnostics, and aerospace diagnostics. Aeronautical engineering is essentially multidisciplinary in nature that includes mathematical principles, computational science and other branches of engineering such as mechanical engineering, electrical engineering, electronic engineering and manufacture engineering.

Aerospace engineers in general and in theory cover both aeronautical and astronautical science. Studies in aerospace engineering are generally multiply disciplinary in nature that includes the principles of physics, chemistry mathematics, algebra, trigonometry and calculus. Aerospace engineering deals with the utilization of mathematical and scientific principles and approaches for design and development of aircraft, spacecraft and missiles whereas the topics covered in the subject of aerodynamics includes orbits, launching and flight controls and engines.

Journal of Aeronautics & Aerospace Engineering is a scientifically validated reference source for aircraft engineers, thermal designers, aircraft production managers, aerospace design checkers, aerospace engineers, CAD technicians, design engineers, maintenance engineers, manufacturing systems engineer, material engineer and mechanical engineers. The Journal furnishes advanced scholarly information for aeronautical and aerospace engineers, system engineers, manufacturing engineers, industrial engineers, mechanical engineers, electrical engineers, computer hardware engineers, architectural managers, airline operator’s, academicians, researchers, aerospace product manufacturers, Research agencies, institutions and organizations. The journal publications forms a resource of knowledge and experience given by the aerospace in practitioners and will be immensely useful for the people working in aeronautical industry and also to researchers academicians and students at various universities Institutions and organizations, including engineering professionals, operators, commercial and legal executives.

The specific topics that are covered by the journal include the designing and development of aircraft manufacturing operation and support of aircraft maintenance, infrastructural development, operations, fundamentals of aerodynamics, proportions, performance, stability control systems designing of wings ground and flight testing techniques and advances in the Research and Technology. The journal particularly focuses on reports that describe the verification and validation of novel designs for future applications and needs. The technical standards and regulations play important role and function as valuable guideline for Aeronautical industry. Computational fluid dynamics, dynamic analysis of Aeronautical structures, emerging Aeronautical applications, mathematical formulation of the structural and Aerodynamic loads, complex multi degree systems, non linear Systems, Electric elastic phenomena of flight vehicles.